BROOKHAVEN NATIONAL LABORATORY

NEW PROJECT REQUEST FORM
PROJECT INFORMATION MODIFICATION FORM
INFRASTRUCTURE & PROGRAM SUPPORT PROJECTS

This form must be used for all new infrastructure and program related projects requesting Line Item, GPP, AIP, or Special Maintenance funds. In addition, use this form to modify existing or supply missing information relating to projects already in the project database. For these projects, only complete the fields which are changing or new. **For projects where ES&H is the primary driver, the ES&H ADS form must be used in lieu of this form so the project may be entered into the ES&H database.** ES&H projects will be electronically transferred into the master project database. The following project information must be provided for a project to be entered into the BNL Project Database.

Expand areas as required

Submitted By:
(*Induce name, department, phone number, Mail Stop, and E-Mail.)*

A. Pendzick,CAD, 4718, 911b, pendzick@bnl.gov

ADS #:
(Existing Projects Only)

Project Title:
Repair of the building 912 roof

Project Origination:
(Examples are program requirement, Visiting Committee recommendation, Building Manager inspection, etc.)
Inspection by the building manager
Requirement by the Tier 1 Safety committee
Requirement by the Radiation Safety Committee
Requirement for a new Experimental program

Project Champion:
(The person best suited to describe the project and the impact of not getting or delaying the project, include name, department, phone number, Mail Stop, and E-Mail.)
Pendzick

DOE Facility Representative:
(The name and phone number of the DOE/BHG person who is the Facility Rep)

Project Estimate:
(Include estimate, source and date of estimate (if ILR give number) , and whether or not engineering, project management, contingency and burden is included.)
Approximately 1.5 M for EEA (venders informal quote)
Approximately .5 M for repairs
Direct costs only

Suggested Project Funding: ***(Check One)***

___	LIN	Line Item - Infrastructure	___	GPP/LL	GPP - Landlord (Site GPP Fund)
___	LIE	Line Item - ES&H	___	GPP/KA	GPP - High Energy Physics Specific
___	AIP/KA	AIP - High Energy Physics Specific	_X_	GPP/KB	GPP - Nuclear Physics Specific

___	AIP/KB	AIP - Nuclear Physics Specific	___	GPP/KC	GPP - Basic Energy Sciences Specific
___	AIP/KC	AIP - BES Specific (Former ARAM)	___	GPP/KP	GPP - OBER Specific
___	OPER	OPERATING FUNDED - Special Maintenance or ES&H Program Support			

Project Description:

(A general description of what the project is and what it will accomplish. Description should be in the context of ES&H, Security, and/or Program impact and benefits. Where applicable, describe any economic payback.)

This project would provide for a complete new roof in the East Experimental area of building 912 and the repair of the roof for the East Experimental Area Addition and the North-West building.

Presently, 100's of gallons of water are leaking through the East Experimental building roof during an average rainfall, damage to electrical equipment, radiation interlocks, and experimental equipment has occurred. This water has leaked into high radiation areas causing the spread of contamination. The EEBA and N/W building have major leaks that must be repaired.

These buildings are the site of a major new experimental program funded by the National Science Foundation. The RSVP experiments, "KOPIO and MECO" are presently scheduled for a FY 2006 start, with an installed value of well over 100 M dollars. It is essential that BNL provide a reasonable environment for these experiments.

Project Assessment:

(Provide general descriptions of the benefits of implementing this project, the impact of not implementing or delaying implementation of the project and any mitigating actions which could be implemented prior to full implementation of the project . Where applicable, describe any economic impact.)

<u>Benefits</u>

Presently installed in the East Experimental Area are many mega-watts of 480v power and a high radiation proton transport line with it's associated magnets, power supplies, instrumentation and radiation interlock systems. During rainstorms the floors are flooded and some areas are not passable due to the rain coming down so hard. Soon a major new 60 M+ dollar experiment "MECO" will be installed. The East Experimental Building Addition, also with many mega-watts of installed power and associated equipment, will be the site of the 40 M+ dollar "KOPIO" experiment and is presently the site of Experiment 941, the only experiment in the world to see a certain type of rare Kaon decay.

BNL owes their employees and experimenters a safe, dry working environment.

The RSVP experiments utilize an upgraded AGS with increased intensity and cycle time. The AGS will be delivering the most intense high energy proton beam in the world to them. Credit must be taken for the integrity of the roof to insure rainwater does not penetrate the floor slab and soil under these experiments. Rainwater percolating

through this soil will carry radioactivity to Long Island's aquifer.

Impacts

Damage to electrical equipment
Damage to experimental equipment
Malfunction of radiation protection equipment
Possible structural damage to the roof deck
Unfit working environment
Possible groundwater protection concerns
Spread of radioactive contamination

Mitigating Measures

We presently see no easy solution but to install a tarp over the East Experimental Area and to patch the other two buildings